



Lessons learnt from developing ESCO projects - performance guarantee & MESA models

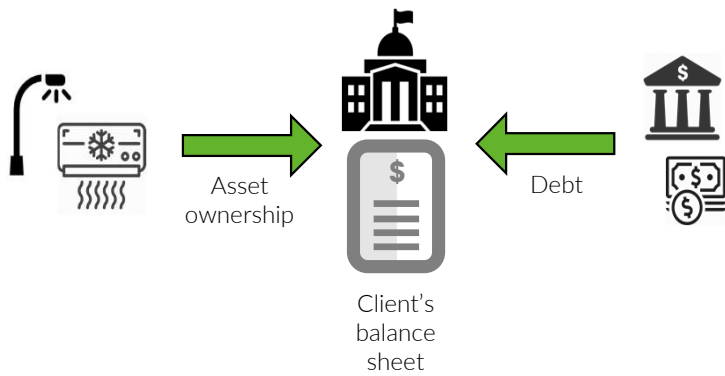
*Third Energy Efficiency Virtual Workshop
Scaling up Super ESCOs and ESCOs in Africa*

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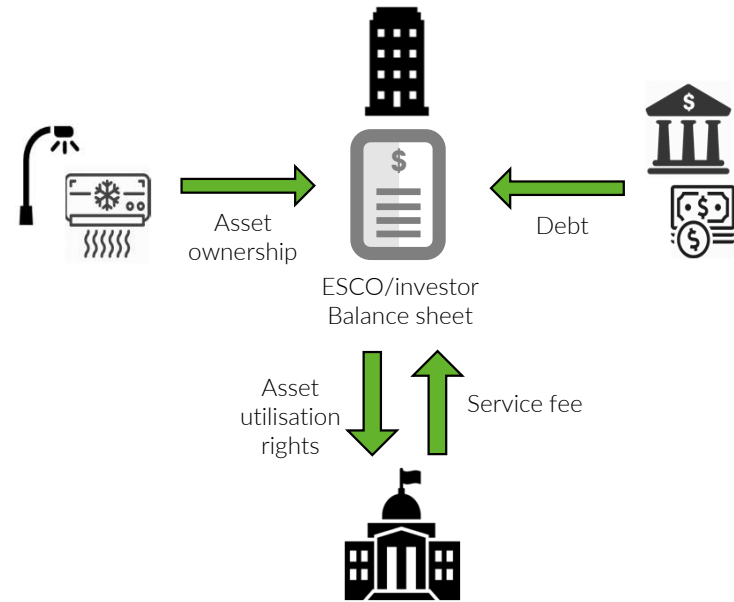
Victor Minguez – United for Efficiency

Many ESCO models

2 Main groups (from asset ownership)



Traditional ownership

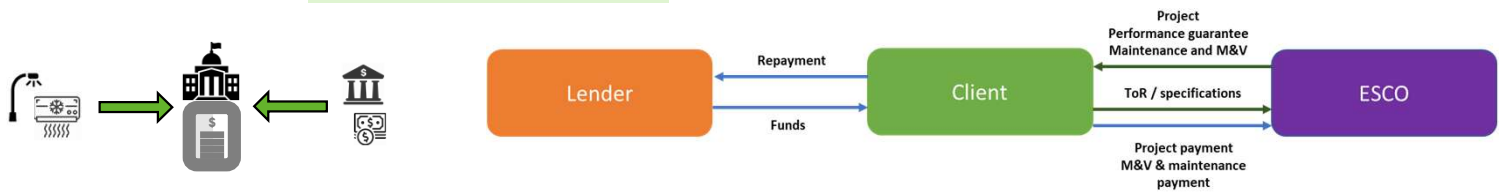


Asset Servitisation

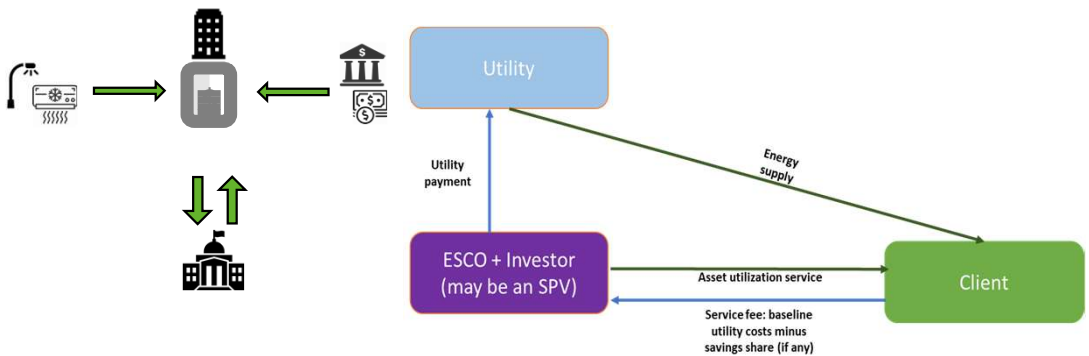
Many ESCO models

An example of each

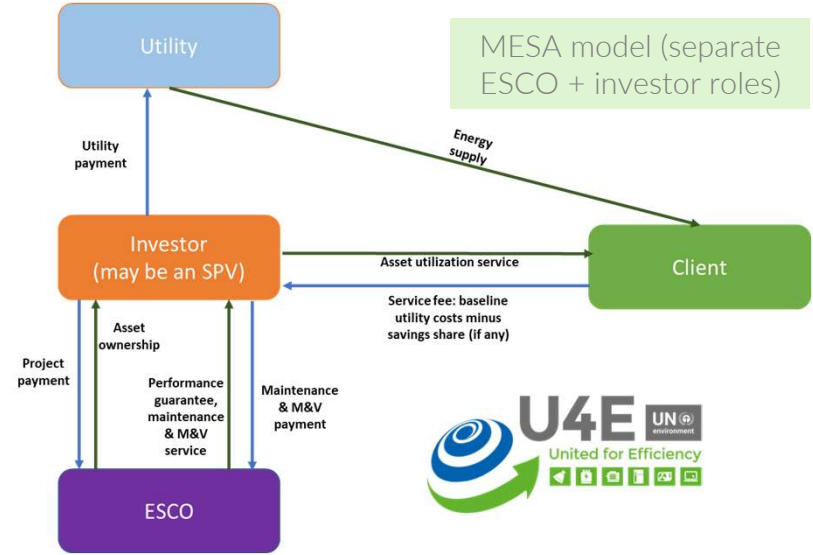
Financed project



MESA model (joint ESCO + investor roles)



MESA model (separate ESCO + investor roles)



Lesson

01



Few people are interested in Energy Efficiency: Don't sell ESCO projects from that angle

- Executive management focuses on providing value to clients (private) / residents (public):
E.g. Hotel manager wants to attract new clients (comfortable rooms, fancy new lobby, etc...).
Production manager wants to improve product quantity/quality, avoid shutdowns...
Municipal manager wants to be reappointed 😊
- Financial management looks after financial stability of organization: debt issuing is limited.
- Maintenance people may perceive the project as a risk to their job / uncover “skeletons” hidden in the infrastructure

Be creative, keep in mind the incentives of everyone in the organization.

Lesson

02

The contract is the only thing that holds over time. People will change.



Include in the contract:

- Baseline, baseline, baseline: (*consumption, opening hours, users, list of assets, weather bins, setpoints, lux levels etc.*)
- Define the scope of work, asset by asset, separating client and contractor responsibilities.
- Implementation period.
- Guarantee types, baseline adjustments, etc.
- Monitoring, Reporting & Verification (MRV) activities
- Maintenance services.
- Specify quality of fuel / consumables that the client will buy.

Lesson

03

Not every model works for every case



For a MESA project to work:

- Large projects with +15% total energy savings.
- Technically & financially savvy ESCOs are needed.
- ESCO must have good control on facility (e.g. facility manager): maintenance, keep track of changes, etc
- Public clients are restricted by procurement and financial management regulations
- Setup agile payment processes (not fun if utility cuts off energy supply because of payment delays)

For an energy performance model to work:

- Harder to account off-balance sheet (investor needed), or client obtains funding.
- Private clients will want short paybacks (3-4 years)
- Public clients are restricted by procurement and financial management regulations

Lesson

04

A good MRV is like a good insurance



- Everybody wants it until they have to pay for it.
- When you need it, you'll regret not having a better one.
- You'll need it more often than you think/want.
- Risk of “over-insuring”: IPMVP type C is expensive and is not adequate for most projects.
- Only certain events are insured: ESCO has to comply with obligations, but should monitor to avoid abuse.

Lesson

05

Some technical lessons



- Don't trust the plans/asset lists, etc. Let the ESCO check by themselves before bidding.
- Lighting changes are the first thing people notice (for good and bad).
- Ventilation is expensive: many good projects exist.
- Virtually all chilled water plants can be optimized.
- Energy is still too cheap.
- If a project is designed creatively (see lesson 1), payback period becomes "irrelevant".

ESCOs are a people's business: good processes + inadequate people = poor results

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Thank you!

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Contact

Victor Minguez



PHONE

+41 44 585 18 08



EMAIL

victor.minguez@un.org